

Version 3.0	Revision Date: 05/05/2015		DS Number: 491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014	
SECTION	1. IDENTIFICATION				
Produ	ict name	:	GOJO® Antimicro	bbial Foam Handwash with PCMX	
Manu	facturer or supplier's	deta	ils		
	pany name of supplier	:	GOJO Industries,	Inc.	
Addre	255	:	One GOJO Plaza, Suite 500 Akron OH 44311		
Telep	hone	:	1 (330) 255-6000		
Emer	gency telephone	:	1-800-424-9300 CHEMTREC		
Recommended use of the		chem	ical and restriction	ons on use	
Recommended use		:	Antibacterial Soa	p	
Restrictions on use		:	This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling proper use of the product for industrial workplace condition as well as unusual and unintended exposures such as lar spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.		

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Flammable liquids	: Category 3
Serious eye damage	: Category 1
GHS Label element Hazard pictograms	
Signal Word	: Danger
Hazard Statements	: H226 Flammable liquid and vapor.



Version 3.0	Revision Date: 05/05/2015	MSDS Number: 36491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
Draca	tionon Ctotomonto		erious eye damage.
Preca	utionary Statements	No smoking. P233 Keep cont P241 Use explo- equipment. P242 Use only r P243 Take prec P280 Wear prot Response: P303 + P361 + all contaminated P305 + P351 + water for severa and easy to do. CENTER or doo Storage: P403 + P235 St Disposal:	y from heat/sparks/open flames/hot surfaces. tainer tightly closed. sion-proof electrical/ ventilating/ lighting/ hon-sparking tools. tautionary measures against static discharge. ective gloves/ eye protection/ face protection. P353 IF ON SKIN (or hair): Take off immediately d clothing. Rinse skin with water/shower. P338 + P310 IF IN EYES: Rinse cautiously with al minutes. Remove contact lenses, if present Continue rinsing. Immediately call a POISON ctor/ physician.

Other hazards

Vapors may form explosive mixture with air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Ethanol	64-17-5	>= 5 - < 10
Dodecanoic acid	143-07-7	>= 5 - < 10
Ethanolamine	141-43-5	>= 1 - < 5
I-(+)-Lactic acid	79-33-4	>= 1 - < 5
4-chloro-3,5-dimethylphenol	88-04-0	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

General advice	 In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medica advice. 	ıl
If inhaled	: If inhaled, remove to fresh air. Get medical attention if symptoms occur.	
In case of skin contact	: Wash with water and soap as a precaution.	



Version 3.0	Revision Date: 05/05/2015	MSDS Number: 36491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014		
		Get medical a	ttention if symptoms occur.		
In case	e of eye contact	for at least 15 If easy to do, r	tact, immediately flush eyes with plenty of water minutes. emove contact lens, if worn. ttention immediately.		
If swallowed		Get medical a	 If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water. 		
Most important symptoms and effects, both acute and delayed		: Causes seriou	is eye damage.		
Protec	tion of first-aiders	: First Aid responders should pay attention to self-protection and use the recommended personal protective equipment when the potential for exposure exists.			
Notes	to physician	: Treat symptomatically and supportively.			

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical	
Unsuitable extinguishing media	:	High volume water jet	
Specific hazards during fire fighting	:	Do not use a solid water stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.	
Hazardous combustion prod- ucts	:	Carbon oxides Nitrogen oxides (NOx)	
Specific extinguishing methods	:	 Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to so. Evacuate area. 	
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.	

SECTION 6. ACCIDENTAL RELEASE MEASURES



Versio 3.0	on	Revision Date: 05/05/2015		SDS Number: 491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
р	orotecti	al precautions, ve equipment and ency procedures	:	• •	ective equipment. ing advice and personal protective
E	Environ	mental precautions	:	Prevent further le Prevent spreading barriers). Retain and dispos	e environment must be avoided. akage or spillage if safe to do so. g over a wide area (e.g. by containment or oil se of contaminated wash water. should be advised if significant spillages ed.
Methods and materials for containment and cleaning up		 Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water jet. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked m can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regulations and the statement of the		t absorbent material. down) gases/vapors/mists with a water spray rovide diking or other appropriate eep material from spreading. If diked material store recovered material in appropriate ng materials from spill with suitable regulations may apply to releases and aterial, as well as those materials and items leanup of releases. You will need to regulations are applicable.	

SECTION 7. HANDLING AND STORAGE

Technical measures	: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	: Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation.
Advice on safe handling	 Avoid inhalation of vapor or mist. Do not swallow. Do not get in eyes. Avoid prolonged or repeated contact with skin. Handle in accordance with good industrial hygiene and safety practice. Non-sparking tools should be used. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage	: Keep in properly labeled containers.



Version 3.0	Revision Date: 05/05/2015	MSDS Number: 36491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
		Store in accorda	sed. well-ventilated place. ance with the particular national regulations. n heat and sources of ignition.
Mater	ials to avoid	Strong oxidizing Organic peroxid Flammable solid Pyrophoric liquid Pyrophoric solid Self-heating sub	les ds ds ds ostances and mixtures d mixtures which in contact with water emit

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u> </u>	•		-	
Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		STEL	1,000 ppm	ACGIH
Ethanolamine	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m3	NIOSH REL
		ST	6 ppm 15 mg/m3	NIOSH REL
		TWA	3 ppm 6 mg/m3	OSHA Z-1

Ingredients with workplace control parameters

Hazardous components without workplace control parameters

Ingredients	CAS-No.
Dodecanoic acid	143-07-7
I-(+)-Lactic acid	79-33-4
4-chloro-3,5-dimethylphenol	88-04-0

Engineering measures

 Minimize workplace exposure concentrations. Use only in an area equipped with explosion proof exhaust ventilation.
 Use with local exhaust ventilation.
 Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at



Versi 3.0	ion	Revision Date: 05/05/2015		SDS Number: 491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
				assessment. Rele Particulates Not C dust, 5 mg/m3 - re Particles (insolubl	to be considered in workplace risk evant limits include: OSHA PEL for Otherwise Regulated of 15 mg/m3 - total espirable fraction; and ACGIH TWA for e or poorly soluble) Not Otherwise /m3 - respirable particles, 10 mg/m3 - 5.
	ז ס ו ו ו ו ו ו ו ו ו ו ו ו ו ו ו ו ו ו				
			: General and local exhaust ventilation is recommended maintain vapor exposures below recommended limits concentrations are above recommended limits or are unknown, appropriate respiratory protection should b Follow OSHA respirator regulations (29 CFR 1910.1 use NIOSH/MSHA approved respirators. Protection by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressu supplied respirator if there is any potential for uncom release, exposure levels are unknown, or any other circumstance where air purifying respirators may not adequate protection.		posures below recommended limits. Where e above recommended limits or are riate respiratory protection should be worn. pirator regulations (29 CFR 1910.134) and A approved respirators. Protection provided spirators against exposure to any cal is limited. Use a positive pressure air or if there is any potential for uncontrolled e levels are unknown, or any other ere air purifying respirators may not provide
		rotection			
	Mate	erial	:	Impervious gloves	3
	Mate	erial	:	Flame retardant g	loves
	Rem	arks	:	on the concentrat time is not determ For special applic resistance to cher	protect hands against chemicals depending ion specific to place of work. Breakthrough ined for the product. Change gloves often! ations, we recommend clarifying the nicals of the aforementioned protective ove manufacturer. Wash hands before end of workday.
	Eye pro	otection	:	Chemical resistan	g personal protective equipment: It goggles must be worn. ely to occur, wear:
	Skin ar	nd body protection	:	resistance data an potential. Wear the following Flame retardant a Skin contact must	e protective clothing based on chemical nd an assessment of the local exposure g personal protective equipment: intistatic protective clothing. be avoided by using impervious protective aprons, boots, etc).
	Hygien	e measures	:	located close to th	ushing systems and safety showers are ne working place. ot eat, drink or smoke.



Version 3.0	Revision Date: 05/05/2015		DS Number: I91-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
			Wash contamin	ated clothing before re-use.
SECTION	9. PHYSICAL AND CH	EMIC	CAL PROPERTI	ES
Арре	arance	:	liquid	
Color		:	clear, Slightly h	azy, blue green
Odor		:	fruity	
Odor	Threshold	:	No data availat	ble
рН		:	7.8 - 9.7	
Meltir	ng point/freezing point	:	No data availat	ble
Initial range	boiling point and boiling	:	No data availal	ble
Flash	n point	:	45.6 °C	
Evap	oration rate	:	No data availat	ble
Flam	mability (solid, gas)	:	Not applicable	
Uppe	r explosion limit	:	No data availat	ble
Lowe	r explosion limit	:	No data availat	ble
Vapo	r pressure	:	No data availat	ble
Relat	ive vapor density	:	No data availat	ble
Dens	ity	:	1 g/cm3	
	bility(ies) ater solubility	:	soluble	
	ion coefficient: n- nol/water	:	Not applicable	
Autoi	gnition temperature	:	No data availat	ble
Deco	mposition temperature	:	The substance	or mixture is not classified self-reactive.
Visco Vis	osity scosity, kinematic	:	10 - 20 mm2/s	(20 °C)
Explo	osive properties	:	Not explosive	
Oxidi	zing properties	:	The substance	or mixture is not classified as oxidizing.





3.0 05/05/2015 36491-00004 Date of first issue: 12/11/2014	Version	Revision Date:	MSDS Number:	Date of last issue: 04/17/2015
	3.0	05/05/2015	36491-00004	Date of first issue: 12/11/2014

SECTION 10. STABILITY AND REACTIVITY

Pagativity	. Not clossified as a reactivity bazard
Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reac- tions	 Flammable liquid and vapor. Vapors may form explosive mixture with air. Can react with strong oxidizing agents.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes Inhalation Skin contact Ingestion Eye contact	s of exposure
Acute toxicity	
Not classified based on availa	able information.
Product:	
Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate: > 40 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Ingredients:	
Ethanol:	
Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 124.7 mg/l Exposure time: 4 h Test atmosphere: vapor
Dodecanoic acid: Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401



rsion)	Revision Date: 05/05/2015	MSDS Number: 36491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
Acute	inhalation toxicity	: LC50 (Rat): > Exposure time Test atmosph Remarks: Bas	e: 4 h
Acute	e dermal toxicity	toxicity): > 2,000 mg/kg The substance or mixture has no acute derma sed on data from similar materials
	oral toxicity	: LD50 (Rat): 1	,515 mg/kg
Acute	inhalation toxicity	Test atmosph Method: Expe	ert judgment sed on harmonised classification in EU regulat
Acute	e dermal toxicity	: LD50 (Rabbit)): 1,025 mg/kg
	Lactic acid: e oral toxicity	: LD50 (Rat, fe	male): 3,543 mg/kg
Acute	inhalation toxicity	: LC50 (Rat): > Exposure time Test atmosph Method: OEC	e: 4 h
Acute	e dermal toxicity	: LD50 (Rabbit)): > 2,000 mg/kg
	oro-3,5-dimethylphe e oral toxicity	: Acute toxicity Method: Expe	sed on harmonised classification in EU regulat
Acute	inhalation toxicity	: LC50 (Rat): > Test atmosph	
Acute	e dermal toxicity	: LD50 (Rat): >	2,000 mg/kg

Not classified based on available information.

Product:

Result: No skin irritation

Ingredients:

Ethanol: Species: Rabbit



Version	Revision Date:	MSDS Number:
3.0	05/05/2015	36491-00004

Date of last issue: 04/17/2015 Date of first issue: 12/11/2014

Method: OECD Test Guideline 404 Result: No skin irritation

Dodecanoic acid:

Species: Rabbit Method: OECD Test Guideline 404 Result: No skin irritation

Ethanolamine:

Species: Rabbit Result: Corrosive after 3 minutes to 1 hour of exposure

I-(+)-Lactic acid:

Species: Rabbit Result: Skin irritation

4-chloro-3,5-dimethylphenol:

Result: Skin irritation Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Serious eye damage/eye irritation

Causes serious eye damage.

Ingredients:

Ethanol: Species: Rabbit Result: Irritation to eyes, reversing within 21 days Method: OECD Test Guideline 405

Dodecanoic acid:

Species: Rabbit Result: Irreversible effects on the eye Method: OECD Test Guideline 405

Ethanolamine:

Species: Rabbit Result: Irreversible effects on the eye

I-(+)-Lactic acid: Species: Chicken eye Result: Irreversible effects on the eye

4-chloro-3,5-dimethylphenol:

Result: Irreversible effects on the eye

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information. Respiratory sensitization: Not classified based on available information.

Product:

Assessment: Does not cause skin sensitization.



Version	Revision Date:	MSDS Number:	D
3.0	05/05/2015	36491-00004	D

Date of last issue: 04/17/2015 Date of first issue: 12/11/2014

Ingredients:

Ethanol:

Test Type: Local lymph node assay (LLNA) Routes of exposure: Skin contact Species: Mouse Result: negative

Dodecanoic acid:

Test Type: Maximization Test (GPMT) Routes of exposure: Skin contact Species: Guinea pig Result: negative

Ethanolamine:

Test Type: Maximization Test (GPMT) Routes of exposure: Skin contact Species: Guinea pig Result: negative

I-(+)-Lactic acid:

Test Type: Buehler Test Routes of exposure: Skin contact Species: Guinea pig Result: negative

4-chloro-3,5-dimethylphenol:

Assessment: Probability or evidence of skin sensitization in humans Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Ethanol: Genotoxicity in vitro	: Test Type: In vitro mammalian cell gene mutation test Result: negative
Genotoxicity in vivo	: Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Mouse Application Route: Ingestion Result: negative
Dodecanoic acid: Genotoxicity in vitro	 Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative Remarks: Based on data from similar materials
Ethanolamine: Genotoxicity in vitro	: Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative



/ersion 3.0	Revision Date: 05/05/2015	MSDS Number:Date of last issue: 04/17/201536491-00004Date of first issue: 12/11/2014
Ge	notoxicity in vivo	: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Ingestion Method: OECD Test Guideline 474 Result: negative
)-Lactic acid: notoxicity in vitro	: Test Type: Chromosome aberration test in vitro Metabolic activation: with and without metabolic activation Result: negative Remarks: Based on data from similar materials
		: Test Type: Bacterial reverse mutation assay (AMES) Metabolic activation: with and without metabolic activation Result: negative
	hloro-3,5-dimethylphenc notoxicity in vitro	I: : Test Type: Bacterial reverse mutation assay (AMES) Result: negative
Carcinogenicity Not classified based on available information. Ingredients: I-(+)-Lactic acid: Species: Rat Application Route: Ingestion Exposure time: 2 Years Result: negative Remarks: Based on data from similar materials		ble information.
		similar materials
IAI	37	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
08	SHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NT	P	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
	productive toxicity classified based on availa	ble information.
Eth	redients: anol: acts on fertility	: Test Type: Two-generation reproduction toxicity study Species: Mouse Application Route: Ingestion Method: OECD Test Guideline 416





Version 3.0	Revision Date: 05/05/2015	MSDS Number: 36491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014	
		Result: negative	9	
	decanoic acid: ects on fertility	reproduction/de Species: Rat Application Rou Method: OECD Result: negative	 Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat Application Route: Ingestion Method: OECD Test Guideline 422 Result: negative Remarks: Based on data from similar materials 	
Eff	ects on fetal development	reproduction/de Species: Rat Application Rou Method: OECD Result: negative	Test Guideline 422	
Eth	nanolamine:			
Eff	ects on fertility	: Test Type: Two Species: Rat Application Rou Result: negative	-	
Eff	ects on fetal development	Species: Rat Application Rou	Test Guideline 414	

STOT-single exposure

Not classified based on available information.

Ingredients:

Ethanolamine:

Assessment: May cause respiratory irritation.

I-(+)-Lactic acid: Assessment: May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Ingredients:

Ethanolamine:

Routes of exposure: inhalation (dust/mist/fume) Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d or less.



Version	Revision Date:	MSDS Number:	Date of la
3.0	05/05/2015	36491-00004	Date of fir

Date of last issue: 04/17/2015 Date of first issue: 12/11/2014

Repeated dose toxicity

Ingredients:

Ethanol: Species: Rat NOAEL: 2,400 mg/kg Application Route: Ingestion Exposure time: 2 y

Dodecanoic acid:

Species: Rat NOAEL: 10,000 mg/kg Application Route: Ingestion Exposure time: 18 w

Ethanolamine:

Species: Rat NOAEL: 150 mg/m3 Application Route: inhalation (dust/mist/fume) Exposure time: 28 d

I-(+)-Lactic acid:

Species: Rat NOAEL: >= 886 mg/kg Application Route: Skin contact Exposure time: 13 w

4-chloro-3,5-dimethylphenol:

Species: Rabbit LOAEL: 180 mg/kg Application Route: Skin contact Exposure time: 90 d

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	
Ingredients: Ethanol: Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h
Toxicity to algae	 EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Exposure time: 72 h Method: OECD Test Guideline 201



Vers 3.0	sion	Revision Date: 05/05/2015		SDS Number: 491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014	
	aquatic	v to daphnia and other invertebrates ic toxicity)	:	NOEC (Daphnia Exposure time: 9	magna (Water flea)): 9.6 mg/l d	
	Toxicity	<i>i</i> to bacteria	:	EC50 (Photobact Exposure time: 0.	erium phosphoreum): 32.1 mg/l 25 h	
	Dodec a Toxicity	anoic acid: / to fish	:	: LC50 (Oryzias latipes (Japanese medaka)): 5 mg/l Exposure time: 96 h Method: OECD Test Guideline 203		
		v to daphnia and other invertebrates	:	EC50 (Daphnia magna (Water flea)): 3.6 mg/l Exposure time: 48 h Method: OECD Test Guideline 202		
	Toxicity	∕ to algae	:	Exposure time: 72 Method: OECD T		
				Exposure time: 72 Method: OECD T		
	Toxicity toxicity)	/ to fish (Chronic)	:	Exposure time: 28	io (zebra fish)): 2 mg/l 3 d on data from similar materials	
	aquatic	 to daphnia and other invertebrates toxicity) 	:	NOEC (Daphnia i Exposure time: 2 Method: OECD T		
	Toxicity	<i>i</i> to bacteria	:	Exposure time: 3	onas putida): > 1,000 mg/l 0 min est Guideline 209	
		plamine: / to fish	:	LC50 (Cyprinus c Exposure time: 9	arpio (Carp)): 349 mg/l 6 h	
		v to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 44	nagna (Water flea)): 65 mg/l 3 h	
	Toxicity	<i>i</i> to algae	: ErC50 (Selenastrum capricornutum (green algae)): 2.8 Exposure time: 72 h			
				NOEC (Scenedes mg/l Exposure time: 72	smus capricornutum (fresh water algae)): 1 2 h	
	Toxicity toxicity)	/ to fish (Chronic)	:	NOEC (Oryzias la Exposure time: 4	atipes (Orange-red killifish)): 1.24 mg/l 1 d	



Vers 3.0	sion	Revision Date: 05/05/2015		SDS Number: 491-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014	
	aquatic	to daphnia and other invertebrates c toxicity)	:	NOEC (Daphnia r Exposure time: 21	nagna (Water flea)): 0.85 mg/l I d	
	Toxicity	to bacteria	:	EC50 (Pseudomonas putida): 110 mg/l Exposure time: 17 h		
	l-(+)-La Toxicity	ctic acid: to fish	:	LC50 (Oncorhync Exposure time: 96	hus mykiss (rainbow trout)): 130 mg/l S h	
		to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48 Method: OECD Te		
	Toxicity	to algae	:	NOEC (Selenastru g/l Exposure time: 72 Method: OECD Te		
				EC50 (Selenastru Exposure time: 72 Method: OECD Te		
	Toxicity	to bacteria	:	EC50: > 100 mg/l Exposure time: 3 Method: OECD Te	h	
	4-chlor Toxicity	o-3,5-dimethylpheno l r to fish	l: :	LC50 (Oncorhync Exposure time: 96	hus mykiss (rainbow trout)): 0.76 mg/l S h	
		to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 48	agna (Water flea)): 7.7 mg/l 3 h	
	M-Facto icity)	or (Acute aquatic tox-	:	1		
	Persist	ence and degradabili	ty			
	Ingredi Ethano Biodegi		:	Result: Readily bi Biodegradation: 8 Exposure time: 20	34 %	
		anoic acid: radability	:	Result: Readily bi Biodegradation: 8 Exposure time: 30 Method: OECD To	36 %	



Version 3.0			DS Number: 191-00004	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
	n olamine: egradability	:	Result: Readily bio Biodegradation: > Exposure time: 21	• 90 [°] %
I-(+)-Lactic acid: Biodegradability		:	Result: Not readily Biodegradation: 6 Exposure time: 20	67 %
Bioad	ccumulative potential			
Ethar Partiti	<u>dients:</u> nol: ion coefficient: n- ol/water	:	log Pow: -0.35	
	canoic acid: cumulation	:		actor (BCF): 234 - 288 on data from similar materials
	ion coefficient: n- ol/water	:	Pow: 4.6	
Partiti	nolamine: ion coefficient: n- ol/water	:	log Pow: -1.91	
Partiti	L actic acid: ion coefficient: n- ol/water	:	log Pow: -0.6	
Partiti	oro-3,5-dimethylphenol: ion coefficient: n- ol/water	:	log Pow: 3.27	
No da Othe i	lity in soil ata available r adverse effects			
No da	ata available			

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods Waste from residues	: Dispose of in accordance with local regulations.
Contaminated packaging	 Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum.



Version	Revision Date:	MSDS Number:	Date of last issue: 04/17/2015
3.0	05/05/2015	36491-00004	Date of first issue: 12/11/2014
-			

SECTION 14. TRANSPORT INFORMATION

International Regulation	
UNRTDG UN number Proper shipping name	: UN 1993 : FLAMMABLE LIQUID, N.O.S. (Ethanol)
Class Packing group Labels	: 3 : III : 3
IATA-DGR UN/ID No. Proper shipping name	: UN 1993 : Flammable liquid, n.o.s. (Ethanol)
Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft)	: 3 : III : Flammable Liquids
IMDG-Code UN number Proper shipping name Class Packing group Labels EmS Code Marine pollutant	 : UN 1993 : FLAMMABLE LIQUID, N.O.S. (Ethanol) : 3 : III : 3 : F-E, <u>S-E</u> : no
Transport in bulk according	to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR	
UN/ID/NA number	: NA 1993
Proper shipping name	: COMBUSTIBLE LIQUID, N.O.S. (Ethanol)
Class	: CBL
Packing group	: 111
Labels	: None
ERG Code	: 128
Marine pollutant	: no
Remarks	: Above applies only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal



	Date of last issue: 04/17/2015 Date of first issue: 12/11/2014
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to 119 gallons (450 liters).

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	Fire Hazard Acute Health Hazard
SARA 302	:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know		
Water	7732-18-5	70 - 90 %
Ethanol	64-17-5	5 - 10 %
Dodecanoic acid	143-07-7	5 - 10 %
Ethanolamine	141-43-5	1 - 5 %
Dipropylene glycol	25265-71-8	1 - 5 %
Propan-2-ol	67-63-0	0.1 - 1 %
New Jersey Right To Know		
Water	7732-18-5	70 - 90 %
Ethanol	64-17-5	5 - 10 %
Dodecanoic acid	143-07-7	5 - 10 %
Ethanolamine	141-43-5	1 - 5 %
Dipropylene glycol	25265-71-8	1 - 5 %

California Prop 65 This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:				
AICS	: All in	gredients listed or exempt.		

Inventories

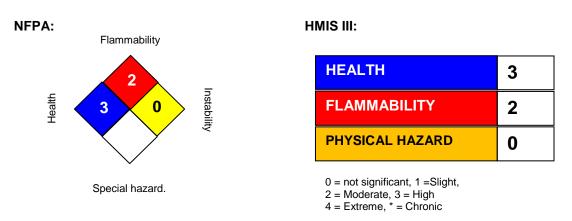


Version	Revision Date:	MSDS Number:	Date of last issue: 04/17/2015
3.0	05/05/2015	36491-00004	Date of first issue: 12/11/2014

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION





Full text of other abbreviations

ACGIH NIOSH REL OSHA Z-1	:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA Z-1 / TWA	:	8-hour time weighted average
Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/
Revision Date	:	05/05/2015

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, un-



Version	Revision Date:	MSDS Number:	Date of last issue: 04/17/2015
3.0	05/05/2015	36491-00004	Date of first issue: 12/11/2014

less specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8